

PROFESSOR WILLIS ON THE CONVENTUAL BUILDINGS AT CANTERBURY.

On Friday, the 5th instant, at the meeting of the Archaeological Institute, Professor Willis gave an account of an examination which he has lately made into the arrangement of the conventual buildings at Canterbury. In his former essay he had deferred this part of the subject, but we believe that an account of his late researches will also be published. The professor said, that, as regards the present subject, we had not the advantage of a careful chronicle, like that of Gervase, but we had what was more valuable, viz., an actual plan of the whole arrangement. This was preserved in a MS. psalter, now in the library of Trinity College, Cambridge. It had been engraved in the second volume of the *Vetus Monumenta*, but not so as to be of much value, and without any consideration of what it was intended to explain, for, in the original, the different parts had been expressed by different colours. It was true that on the drawing there was no title, but it was quite clear, as the professor showed, that it could belong only to Canterbury. He had made an exact survey of the ruins, which were scattered about through several houses and gardens. The result was the plan before them, which he proceeded to compare with a transcript of the old drawing, both being on the same scale.

The first thing which should be mentioned was, that the drawing in the MS. had been made during the period between the death of Anselm and the fire of 1174. It therefore necessarily gave a very different view to that of the building in its present state, or even in a period little later. For instance, on the north, the original plan showed two walls, with a road between, one being the boundary of the precinct, and the other, the wall of the city; but it was known that the monks had obtained permission to include the space within their precinct, on the condition of keeping the city wall in repair.

The professor then explained other points of difference, and proceeded to compare the component parts of the plan he had laid down, with that of the monk, noticing the north-west gate, and the gate of the cemetery at the south-west; the cloister, which was at present perpendicular, but had, on its east side, clear evidence of its original condition, in some Norman doorways—and the chapter-house. The dormitory was an immense building, 145 feet by 80 feet, and was supported upon a substruction of piers, which remain, as well as some of the original windows of the dormitory. It had been supposed that this building was roofed in two spans, and this he had been able to confirm, from the existence of a pier in the end wall. In this part of the plan, and throughout, we found evidence of the greatest attention to convenience and comfort, as well as to health, and the examination of such buildings would afford many valuable hints for the arrangement of domestic edifices. There was ready communication, by enclosed passages, with the cloisters and other parts of the plan, so that, though to be considered mainly as an assemblage of detached buildings, access could be had from one to another, without exposure to the cold. The passage to the church still exists, supported by a cloister, of pure early Norman architecture, and which might almost be mistaken for the style of Wren, or Inigo Jones, and served to show how slight was, in reality, the separation between the Roman and the Romanesque styles. The passage was raised because the choir was raised upon its crypt.—The professor then noticed the kitchen and refectory, which were joined by a passage, and the *cellarium*, and other offices. Perhaps the most curious building of all was the *necessarium*, which was of great size, and from its arrangement, and character of decoration, was clearly considered to be not less important than any other department, and occupied an equally conspicuous position. It had a centre division and side aisles: in the latter were stone seats, the whole number being half that of the monks. These conveniences were well ventilated and supplied with water.

The infirmary externally appeared, like the body of a church, with a chancel to it, and indeed here, and elsewhere, had often been considered to be for that purpose. But in reality these buildings were infirmaries, with a

chapel at the end, having its own chancel. There were similar buildings at Ely and Peterborough. The infirmary department included also a kitchen, a *necessarium*, and a refectory for convalescents.—The house of the prior was then noticed, as confirming, in a striking manner, previous remarks on the arrangement. The prior's chapel, of which the present building was indeed later than the monk's plan, showed great ingenuity, in many points connected with its situation. The prior had ready access to the choir, and to all parts of the convent, and, by means of hagiocopes, he was able to see the celebration of masses in the church. One of these hagiocopes had, in fact, several slits or perforations, so inclined or radiated, that it gave views of altars in several positions. Now this, he thought, explained a reference to the building which had given him some trouble, and that "*domus ratri*," the house of the rake, or harrow, referred to this building and hagiocope.

The account further extended to the house of the guests, the refectory for distinguished visitors, and the locutory, or place for conversation. The gateway of this latter portion was now enclosed in the house of one of the canons. The staircase, drawn in Cavalier's work, was also shown upon the original drawing. The outer and inner cemeteries stood on the south side of the church.

The professor said he had thus vindicated the accuracy of the monk's drawing, but he proceeded to give what was evidently the object with which it was made, namely, the explanation of the distribution of the water. The plan was intersected by lines in different colours, representing water-courses, and these, with the exception that iron pipes had been substituted, still supplied the houses of the canons. The water being obtained from some distance on the north, flowed by a canal through several ponds, passing the wall under a tower.—We regret that we are not able to describe all these ingenious contrivances without the assistance of the plan, but it may be sufficient to mention a few particulars.—The professor showed that the water was deposited in a central situation, in an octagonal building, which had been called the baptistery, but which was really the *castellum aquæ*. The drawing showed a central pillar, or cluster of pillars, through which the pipes rose, and this he had confirmed by examination. The water emptied itself into a basin, whence it was distributed to all parts of the convent. In another locality, there was a similar building, probably used as a lavatory. There was a contrivance for getting rid of the water, and cocks were mentioned. The waste water was carried under the *necessarium* of the infirmary, and then divided to cleanse the two sides of the great *necessarium*. The waste was finally ejected into the town ditch. At one place there was a spot marked "*puteus*" on the drawing, and this well was, no doubt, for a further supply, in times of drought.—Certain lines were marked yellow, and these indicated the rain-water pipes. One pipe, attached to the reservoir, was called "*purgatorium*;" this was probably (as we understood) an overflow pipe.—He also showed a transcript, from the same source, of another drawing, which had never been published, which drawing further explained the course of the water, and he also exhibited a plan of the monastery of St. Gall, which we have frequently referred to, which had been lately published, with a description, in Germany. The professor concluded by saying, that when proper allowances were made, the drawing must be considered as one of great interest and value. From old drawings, much information could be acquired, if we looked at them, considering that only which they were intended to represent. He thought that the names of many buildings in monasteries had been given somewhat hastily, and he expressed an intention of again returning to the subject.

In the discussion, which ensued, Professor Cockerell and others joined, and Dr. Bromet mentioned a fine example of a monastic building at Angers. A question was also asked as to the uses of pulpits in refectories. A letter was read from the town clerk at Doncaster, in reply to an application from the Institute respecting the preservation of the church of St. Mary Magdalene, which, our readers know, is shortly to be destroyed. The letter called forth some laughter:—the authorities were quite ready to admit everything represented to them, and, had

not the site been so central, would have been ready to preserve the building; the applicants would, however, be allowed to re-erect the building wherever they pleased, and the Town Council thought it expedient that a draughtsman should be engaged to make careful drawings.—A letter was also read, denying the reports, as to the mutilation of the church of Deerhurst.—Mr. Petrie and Dr. Todd had also been applied to, respecting the reported interference with some remains in Ireland. The answer from the former stated, that within his own recollection, the destruction had been most deplorable, and of 300 inscribed tombs, which he had known, perhaps 12 did not now remain. The importance of some Government interference was shown to be very great, and the proceedings of the Ecclesiastical Commissioners were censured.—The Marquis of Northampton made a valuable suggestion respecting the opportunity which the establishment of public parks and gardens afforded, for the preservation of antiquities.—Mr. Hawkins commented severely upon the continued inattention to the state of danger of the Chapter House at Westminster, and of the valuable documents which it contains, and the Dean of Westminster, who was in the chair, after showing that this was a matter entirely in the hands of Government, confirmed the statement, saying, that far from being in an ordinary state of safety, the danger was most imminent.

THE IPSWICH COMPETITION.

AN advertisement from the committee for the erection of a new mechanics' institution, to whose proceedings we have already referred, informing competitors, that the design bearing the motto of "*May they please you*" has been selected, and that the other plans may be had on application, conveyed to us the disagreeable intelligence, that architects were found sufficiently averse to submit designs on the insulting terms offered by the committee. Up to this time the whole proceedings have been secret and mysterious, but we hope to be able to remove the veil, in order to see how the committee have discharged the latter part of their duty. Their proceedings in the first step make us very suspicious of the second.

PRICE OF TIMBER.

The *Mark Lane Express* of March 1st gives the following list of prices:—

	£.	s.	d.	¢.
Baltic Timber, per load of 80 cubic feet	4	0	0	6
Yew Deals, per standard hundred	12	10	0	0
Dutch Deals, per 40 feet 3 in.	1	3	0	0
Lathwood, per 100 ft. of 4 feet	3	10	0	0
Petersburg Riga and Archangel	10	0	0	0
Yew Deals, per standard hundred	14	0	0	0
White	14	0	0	0
Yew Battens	4	0	0	0
Riga Logs, for 16 feet cubic	4	0	0	0
Swedish Timber, per load	3	0	0	0
Gambier, Yew Deals, p. 100 12 ft. 6 in.	25	0	0	0
White ditto	22	0	0	0
Yew Battens, per 100 ft. 12 ft. 6 in.	14	10	0	0
Christiansburg, per 100 ft. 12 ft. 6 in.	29	0	0	0
White	27	10	0	0
Quebec and St. John's Spruce Deals	17	10	0	0
per 100 ft. 12 ft. 6 in.	17	0	0	0
1st qual. Yew Pine Deals, per 100 ft. 12 ft. 6 in.	18	0	0	0
Second do.	12	10	0	0
Red Pine Deals, per 100 ft. 12 ft. 6 in.	10	0	0	0
Red Pine Timber, per load	4	0	0	0
Yew ditto	3	10	0	0
Birch ditto	3	10	0	0
Elm ditto	4	10	0	0
Oak ditto	0	0	0	0

MAHOGANY.

Mahogany, St. Domingo	44d. to 1s. 6d. per foot.
Cuba	4
Honduras	4
African	4
Cedar	4
Rosewood	4
Balsa	4

CONSUMING SMOKE.—In proof of the increase of heat gained by burning the smoke, we may cite the experiment of Mr. Henry Holdsworth, of Manchester, who has shown that in the front flue of a furnace, of common construction, the thermometer seldom rose above 1,100 degrees Fahrenheit, and often fell below 900 degrees, the mean being 975 degrees, while in the same furnace, when consuming its smoke, the mean temperature was 1,160 degrees Fahrenheit, ranging between 1,400 degrees and 1,000 degrees. The quantity of water evaporated by a pound of coal was one-half quarter more than when the smoke was not consumed.